

DONALD R. VAN DER VAART

Secretary

SHEILA C. HOLMAN

Director

March XX, 2016

Ray Maxwell, P.E. Public Works Director Gaston County Landfill – Hardin Site PO Box 1578 Gastonia, North Carolina 28503

SUBJECT: Air Quality Permit No. 09884T04

Facility ID: 3600339

Gaston County Landfill - Hardin Site

Dallas, North Carolina

Gaston County Fee Class: Title V PSD Class: Minor

Dear Mr. Maxwell:

In accordance with your completed Air Quality Permit Application for a Modification/Consolidation with the Gaston County Green Energy Park permit received October 23, 2015, we are forwarding herewith Air Quality Permit No. 09884T04 to Gaston County Landfill – Hardin Site, located at 3155 Philadelphia Church Road, Dallas, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

Ray Maxwell, P.E. March XX, 2016
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You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

Gaston County has triggered increment tracking under PSD for  $PM_{10}$ ,  $SO_2$ , and  $NO_x$ . However, this permit modification does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from March XX, 2016 until February XX, 2021, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Lori Ann Phillips at (919) 707-8461 or lori.phillips@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section Division of Air Quality, NCDEQ

# Enclosure

c: Heather Ceron, EPA Region 4
 Mooresville Regional Office
 Central Files
 Connie Horne (cover letter only)

# ATTACHMENT to Permit No. 09884T04

# **Insignificant Activities per 15A NCAC 02Q .0503(8)**

Emission Source ID No.	Emission Source Description
IES-1	Two (2) leachate storage tanks (250,000 gallon capacity, each)
IES-2	Oil storage tank (1,000 gallon capacity)
IES-3	Waste oil tank (300 gallon capacity)
IES-4	Waste oil furnace (0.0175 million Btu per hour maximum heat capacity)

- 1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
- 2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit".
- 3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "The Regulatory Guide for Insignificant Activities/Permits Exempt Activities". The link to this site is as follows: <a href="http://daq.state.nc.us/permits/insig/">http://daq.state.nc.us/permits/insig/</a>

# Summary of Changes to Permit

The following changes were made to the Gaston County Landfill – Hardin Site, Air Permit No. 09884T04

Existing	New	Section	Description of Changes	
Page(s)	Page(s)			
Cover and	Cover and	All	Converted/consolidated the existing Small permits, 09884R03 and	
throughout	throughout		10047R01, to a Title V permit. Updated all dates and permit	
			revision numbers. Changed the name of the department to	
			"Department of Environmental Quality."	



# State of North Carolina Department of Environmental Quality Division of Air Quality

# AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
09884T04	09884R03 and 10047R01	March XX, 2016	February XX, 2021

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

**Permittee:** Gaston County Landfill – Hardin Site

Facility ID: 3600339

Facility Site Location: 3155 Philadelphia Church Road

City, County, State, Zip: Dallas, Gaston County, North Carolina 28034

Mailing Address: PO Box 1578

City, State, Zip: Gastonia, Gaston County, North Carolina 28503

Application Number: 3600339.15A

Complete Application Date: February XX, 2016

Primary SIC Code: 4953 and 4911

Division of Air Quality, Mooresville Regional Office

Regional Office Address: 610 East Center Avenue, Suite 301 Mooresville, North Carolina 28115

Permit issued this the X<sup>th</sup> day of March, 2016.

William D. Willets, P.E., Chief, Air Permitting Section

By Authority of the Environmental Management Commission

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# SECTION 1 - PERMITTED EMISSION SOURCES AND ASSOCIATED AIR POLLUTION CONTROL DEVICES AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page	Emission Source	Emission Source	Control Device	Control Device
No(s).	ID No.	Description	ID No.	Description
	ES-1	Municipal solid waste landfill facility	CD-GCCS*	Landfill gas collection and control system
	(NSPS Subpart WWW)		CD-3	Landfill gas-fired open flare (56.83 million Btu per hour maximum heat input based on methane gas)
			CD-4	Landfill gas-fired open flare (5.8 million Btu per hour maximum heat input based on methane gas)
	ES-2 (NSPS Subpart JJJJ and NESHAP Subpart ZZZZ)	Landfill gas-fired internal combustion engine powering electrical generator (1,996 horsepower and 1,421 kilowatt maximum capacity)	N/A	N/A
	ES-3 (NSPS Subpart JJJJ and NESHAP Subpart ZZZZ)	Landfill gas-fired internal combustion engine powering electrical generator (1,996 horsepower and 1,421 kilowatt maximum capacity)	N/A	N/A
	ES-4 (NSPS Subpart JJJJ and NESHAP Subpart ZZZZ)	Landfill gas-fired internal combustion engine powering electrical generator (1,996 horsepower and 1,421 kilowatt maximum capacity)	N/A	N/A

<sup>\*</sup>The landfill gas collection system was installed voluntarily, therefore the regulations associated with the collection system do not apply to this facility.

# **SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS**

# 2.1- Emission Sources and Control Devices Specific Limitations and Conditions

The emission sources and associated air pollution control devices and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

#### A. One municipal solid waste landfill facility (ES-1) with associated:

 Gas collection and control system (CD-GCCS) and two backup open flares (56.83 million Btu per hour heat input, CD-3, and 5.8 million Btu per hour heat input, CD-4). Flare design prevents simultaneous operation of CD-3 and CD-4.

This following table provides a summary of limits and standards for the emissions sources as described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521

Regulated Pollutant	Limits/Standards	Applicable Regulation
Nonmethane organic	Less than 50 megagrams per year	15A NCAC 02D .0524
compounds (NMOC)		40 CFR Part 60, Subpart
		WWW
Odorous emissions	Apply suitable odor control measures	15A NCAC 02D .1806
	State-enforceable only	

#### 1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the flares (ID Nos. CD-3 and CD-4) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

#### **Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

# Monitoring/Recordkeeping [15A NCAC 02Q .0508(f) and 15A NCAC 02D .2601]

c. No monitoring/recordkeeping is required for sulfur dioxide emissions from the firing of landfill gas in the flare (ID Nos. CD-3 and CD-4).

#### 2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the flares (ID Nos. CD-3 and CD-4) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

#### **Testing** [15A NCAC 02D .0501(c)(8)]

b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .0501(c)(8) and General Condition JJ located in Section 3. If the results of this test are above the limit given in Section 2.1 A.2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02O .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of landfill gas in the flares (ID Nos. CD-3 and CD-4).

# 3. 15A NCAC 02D .0524, 40 CFR Part 60, Subpart WWW "New Source Performance Standards"

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524
 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart WWW, including Subpart A "General Provisions."[15A NCAC 02D .0524]

#### Standards For Air Emissions From Municipal Solid Waste Landfills [40 CFR 60.752]

- b. The Permittee shall calculate an NMOC emission rate for the landfill using the procedures specified in Permit Condition 2.1.A.3.c of this permit. The NMOC emission rate shall be recalculated annually, except as provided in 2.1.A.3.e.1 of this permit.
  - i. If the calculated NMOC emission rate is less than 50 megagrams per year, the owner or operator shall:
    - (A) submit an annual emission report, except as provided for in e.i of this section; and
    - (B) recalculate the NMOC emission rate annually using the procedures specified in c.i of this section until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed.
      - (1) If the NMOC emission rate is equal to or greater than 50 megagrams per year upon recalculation, the owner or operator shall install a collection and control system in compliance with paragraph (b)(ii) of this section.
      - (2) If the landfill is permanently closed, a closure notification shall be submitted to the DAQ as provided for in §60.757(d).

- ii. If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the Permittee shall:
  - (A) submit a collection and control system design plan prepared by a professional engineer who is registered in the State of North Carolina within one year.
    - (1) The collection and control system as described in the plan shall meet the design requirements of b.ii.(B) of this section.
    - (2) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of §§60.753 through 60.758 proposed by the Permittee.
    - (3) The collection and control system design plan shall either conform with specifications for active collection systems in §60.759 or include a demonstration to the DAQ's satisfaction of the sufficiency of the alternative provisions to §60.759.
  - (B) install a collection and control system that captures the gas generated within the landfill as required by paragraphs (b)(2)(ii)(A) or (B) and (b)(2)(iii) of §60.752 within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the emission rate is less than 50 megagrams per year, as specified in §§60.757(c)(1) or (2).
    - (1) An active collection system shall:
      - (a) be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;
      - (b) collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of
        - (i) 5 years or more if active; or
        - (ii) 2 years or more if closed or at final grade.
      - (c) collect gas at a sufficient extraction rate; and
      - (d) be designed to minimize off-site migration of subsurface gas.
    - (2) A passive collection system shall:
      - (a) comply with the provisions specified in Conditions 2.1.A.3.b.ii.(B)(1)(a), (b), and (d) of this permit; and
      - (b) be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under §258.40.
    - (3) Route all the collected gas to a control system that complies with the requirements in either paragraph (a), (b), or (c) below.
      - (a) An open flare designed an operated in accordance with §60.18 except as noted in §60.754(e);
      - (b) A control system designed and operated to reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test method specified in §60.754(d).
      - (c) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of paragraphs (a) and (b) above.
    - (4) Operate the collection and control device installed to comply with this subpart in accordance with the provisions of §§60.753, 60.755 and 60.756.

#### Test Methods and Procedures [15A NCAC 02D .0524, 40 CFR 60.754]

- c. The Permittee shall calculate the NMOC emission rate using the equation provided in paragraph i below. The values to be used in both equations are 0.05 per year for k, 170 cubic meters per megagram for  $L_0$ , and 4,000 parts per million by volume as hexane for the  $C_{NMOC}$ .
  - i. The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^{n} 2kL_o M_i (e^{-kt} i) (C_{NMOC}) (3.6 \times 10^{-9})$$

Where,

 $M_{NMOC}$  = Total NMOC emission rate from the landfill, megagrams per year K = methane generation rate constant, year<sup>-1</sup>

 $L_{\text{o}}\!=\!$  methane generation potential, cubic meters per megagram solid waste  $M_{i}\!=\!$  mass of solid waste in the  $i^{th}$  section, megagrams ti = age of the  $i^{th}$  section, years  $C_{\text{NMOC}}\!=\!$  concentration of NMOC, parts per million by volume as hexane  $3.6*10^{-9}\!=\!$  conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for  $M_i$  if documentation of the nature and amount of such wastes is maintained.

- ii. If the NMOC emission rate calculated is less than 50 megagrams per year, then the landfill owner shall submit an emission rate report annually as required under b.i.(B) of this section.
- iii. If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the landfill owner shall either comply with b.ii. of this section, or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the *Tier 2 Sampling procedures* provided in §60.754(a)(3).
- iv. If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 50 megagrams per year, then the Permittee shall either comply with b.ii. of this section, or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the *Tier 3 Sampling procedure* specified in paragraph (a)(4) of 40 CFR §60.754.
- v. If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the owner or operator shall comply with b.i.(B) of this section
- vi. The Permittee may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in 40 CFR §60.754(a)(3) and (a)(4).

#### Monitoring/Recordkeeping [40 CFR 60.756 and 60.758]

d. The Permittee shall keep for at least 5 years, up-to-date, readily accessible, on-site records of the design capacity report which triggered the standard of 2.5 million megagrams and 2.5 million cubic meters, the current amount of solid waste in-place and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable. If the monitoring and recordkeeping requirements are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

#### **Reporting** [40 CFR 60.757]

- e. The Permittee shall submit an annual NMOC emission rate report, acceptable to the Regional Air Quality Supervisor, on or before January 30 of each calendar year except as provided in the paragraphs below. The report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 3.c. of this Section.
  - (i) If the estimated NMOC emission rate is less than 50 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the DAQ. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the DAQ. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.
  - (ii) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions. The Regional Office may request such additional information as may be necessary to verify the reported NMOC emission rate.
  - (iii) The Permittee is exempted from the requirements of paragraphs e(i) and (ii) of this section, after the installation of a collection and control system in compliance with §60.752(b)(2), during such time as the collection and control system is in operation and in compliance with §80.753 and 60.755.

#### STATE-ONLY REQUIREMENT: ODOR REQUIREMENTS

4. 15A NCAC 02D .1806 "Control and Prohibition of Odorous Emissions" (State-enforceable only)

The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

# B. Three landfill gas-fired internal combustion engines powering electrical generators (1,996 horsepower and 1,421 kilowatt maximum capacity, each)(ES-2, ES-3, and ES-4)

This following table provides a summary of limits and standards for the emissions sources as described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
CO, NOx, VOCs	Exhaust Emission Standards for engines manufactured after	15A NCAC 02D .0524
	7/1/2010	40 CFR Part 60, Subpart
	CO: 5.0 g/Hp-hr or 610 ppmvd at 15% O <sub>2</sub>	1111
	NOx: 2.0 g/Hp-hr or 150 ppmvd at 15% O <sub>2</sub>	
	VOCs: 1.0 g/Hp-hr or 80 ppmvd at 15% O <sub>2</sub>	
Hazardous air	Meet the requirements of 40 CFR Part 60, Subpart JJJJ	15A NCAC 02D .1111
pollutants		40 CFR Part 63, Subpart
		ZZZZ
Odorous emissions	Apply suitable odor control measures	15A NCAC 02D .1806
	[State-enforceable only]	
NOx, CO, PM10/	Emissions Limits and Good Combustion Practices [State-	NCGS 62-133.8(g)
PM2.5, SO <sub>2</sub> , VOCs,	enforceable only]	State BACT
Pb, and Hg		

#### 1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the engines (ID Nos. ES-2, ES-3, and ES-4) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

#### **Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 B.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

#### Monitoring/Recordkeeping [15A NCAC 02Q .0508(f) and 15A NCAC 02D .2601]

c. No monitoring/recordkeeping is required for sulfur dioxide emissions from the firing of landfill gas in the enginegenerator sets (ID Nos. ES-2, ES-3, and ES-4).

# 2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the engines (ID Nos. ES-2, ES-3, and ES-4) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

#### **Testing** [15A NCAC 02D .0501(c)(8)]

b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .0501(c)(8) and General Condition JJ located in Section 3. If the results of this test are above the limit given in Section 2.1 B.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of landfill gas in the engine-generator sets (ID Nos. ES-2, ES-3, and ES-4).

# 3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

- Three landfill gas-fired internal combustion engines powering electrical generators (1,996 horsepower and 1,421 kilowatt maximum capacity)(ES-2, ES-3, and ES-4)
- a. The Permittee shall comply with all applicable provisions, including the requirements for emission standards,

notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart JJJJ, including Subpart A "General Provisions." [15A NCAC 02D .0524]

#### Emission Standards [40 CFR 60.4233(e)]

b. The Permittee shall comply with the following emission standards for spark ignition (SI) engines for model year manufactured after July 1, 2010. Stationary spark ignition internal combustion engines shall achieve the required emission standards over the entire life of the engine.

#### Exhaust emission standards:

CO: 5.0 g/Hp-hr or 610 ppmvd at 15% O<sub>2</sub> NOx: 2.0 g/Hp-hr or 150 ppmvd at 15% O<sub>2</sub> VOCs: 1.0 g/Hp-hr or 80 ppmvd at 15% O<sub>2</sub>

#### **Testing** [15A NCAC 02Q .0508(f), 40 CFR 60.8]

c. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.3.b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

# Initial Performance Testing [15A NCAC 02Q .0508(f), 40 CFR 60.4243(b) and 40 CFR 60.4244]:

d. The Permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. An initial Performance test shall be conducted for NOx, CO, and VOC emissions for engines ES-2, ES-3, and ES-4) and the Permittee shall conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

#### Recordkeeping/Reporting/Notification [15A NCAC 02Q .0508(f), 40 CFR 60.4245]

- e. Stationary spark (SI) ignition internal combustion engines shall meet the following notification, reporting and recordkeeping requirements.
  - i. Keep records of the following information:
    - (A) All notifications submitted to comply with this subpart and all documentation supporting any notification.
    - (B) Maintenance conducted on the engine.
    - (C) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
    - (D) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.
  - ii. Stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231 must submit an initial notification as required in 40 CFR §60.7(a)(1). The notification must include the information:
    - (A) Name and address of the Permittee;
    - (B) The address of the affected source;
    - (C) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
    - (D) Emission control equipment; and
    - (E) Fuel used.
  - iii. Stationary SI ICE that are subject to performance testing shall submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed.

# 4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL

The Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission

Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" as promulgated in 40 CFR Part 63 Subpart ZZZZ "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)"

- Three landfill gas-fired internal combustion engines powering electrical generators (1,996 horsepower and 1,421 kilowatt maximum capacity, each)(ES-2, ES-3, and ES-4)
- a. Pursuant to 40 CFR 63.6590(c)(1), this RICE engine shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ and Subpart A by meeting the requirements of 40 CFR Part 60 Subpart JJJJ.

# Notification Requirements [15 A NCAC 02Q. 0508(f)]

b. No notifications are required for this source.

# STATE-ONLY REQUIREMENT: ODOR REQUIREMENTS

5. 15A NCAC 02D .1806 "Control and Prohibition of Odorous Emissions" (State-enforceable only)

The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

#### STATE ENFORCEABLE ONLY

- 6. NORTH CAROLINA GENERAL STATUTE GS 62 -133.8(g) SB3 STATE BACT EMISSION LIMITS
  - Carbon Monoxide (CO)
  - Nitrogen Oxides (NOx)
  - Particulate Matter (PM10/PM2.5)
  - Volatile Organic Compounds (VOCs)
  - Sulfur Dioxide (SO<sub>2</sub>)
  - Lead (Pb)
  - Mercury (Hg)
  - a. Best Available Control Technology:
    - i. In order to comply with the best available control technology (BACT) determination pursuant to GS 62-133.8 (g) for Carbon Monoxide:
      - Carbon Monoxide emissions shall not exceed 4.0 g/hp-hr.
    - ii. In order to comply with the best available control technology (BACT) determination pursuant to GS 62-133.8 (g) for Nitrogen Oxides:
      - Nitrogen Oxide emissions shall not exceed 1.5 g/hp-hr.
    - iii. In order to comply with the best available control technology (BACT) determination pursuant to GS 62-133.8 (g) for PM10/PM2.5, Sulfur Dioxide, Volatile Organic Compounds, Mercury, and Lead:
      - PM10/PM2.5, Sulfur Dioxide, Volatile Organic Compounds, Mercury, and Lead shall be controlled from each engine using good combustion practices and the burning of landfill gas in the engine.
  - b. Test results (g/hp-hr) from 40 CFR 60.4244, NSPS Subpart JJJJ shall be used to demonstrate compliance with the State BACT limits listed above in this Section.
  - c. The Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
    - i. The Permittee shall perform an annual inspection (for each 12 month period following the initial inspection) to ensure the engine is operating properly.

- ii. The results of the inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - (A) The date and time of each recorded action;
  - (B) The results of each inspection;
  - (C) The results of any maintenance performed on the engine; and
  - (D) Any variance from manufacturer's recommendations, if any, and the corrections made.
- d. The Permittee shall maintain a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping listed above and shall submit the results within 30 days of a written request by the DAQ.

# **SECTION 3 - GENERAL CONDITIONS (version 4.0 12/17/15)**

This section describes terms and conditions applicable to this Title V facility.

#### A. **General Provisions** [NCGS 143-215 and 15A NCAC 2Q .0508(i)(16)]

- 1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 2D and 2Q.
- The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable
  pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any
  unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement
  action by the DAO.
- 3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
- 4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
- 5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
- 6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

#### B. **Permit Availability** [15A NCAC 2Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

#### C. Severability Clause [15A NCAC 2O .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

#### D. **Submissions** [15A NCAC 2Q .0507(e) and 2Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance North Carolina Division of Air Quality 1641 Mail Service Center Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

# E. **Duty to Comply** [15A NCAC 2Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

# F. Circumvention - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

#### G. Permit Modifications

- 1. Administrative Permit Amendments [15A NCAC 2Q .0514]
  - The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 2Q .0514.
- Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 2Q .0524 and 2Q .0505]
   The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 2Q.0524 and 2Q .0505.
- 3. Minor Permit Modifications [15A NCAC 2Q .0515]
  - The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 2Q .0515.
- 4. Significant Permit Modifications [15A NCAC 2Q .0516]
  - The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 2Q .0516.
- 5. Reopening for Cause [15A NCAC 2Q .0517]
  - The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 2Q .0517.

# H. Changes Not Requiring Permit Modifications

1. Reporting Requirements

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application;
- b. changes that modify equipment or processes; or
- c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

#### 2. Section 502(b)(10) Changes [15A NCAC 2Q .0523(a)]

- a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
  - i. the changes are not a modification under Title I of the Federal Clean Air Act;
  - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
  - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
  - iv. the Permittee shall attach the notice to the relevant permit.
- The written notification shall include:
  - i. a description of the change;
  - ii. the date on which the change will occur;
  - iii. any change in emissions; and
  - iv. any permit term or condition that is no longer applicable as a result of the change.
- Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
- 3. Off Permit Changes [15A NCAC 2Q .0523(b)]

The Permittee may make changes in the operation or emissions without revising the permit if:

- a. the change affects only insignificant activities and the activities remain insignificant after the change; or
- b. the change is not covered under any applicable requirement.
- 4. Emissions Trading [15A NCAC 2Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 2D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 2Q .0523(c).

I.A Reporting Requirements for Excess Emissions and Permit Deviations [15A NCAC 2D .0535(f) and 2Q .0508(f)(2)] "Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 2D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 2Q .0700. (Note: Definitions of excess emissions under 2D .1110 and 2D .1111 shall apply where defined by rule.)

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

#### **Excess Emissions**

- 1. If a source is required to report excess emissions under NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
- 2. If the source is not subject to NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 2D .0535 as follows:
  - a. Pursuant to 15A NCAC 2D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
    - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
      - name and location of the facility;
      - nature and cause of the malfunction or breakdown;
      - time when the malfunction or breakdown is first observed;
      - expected duration; and
      - estimated rate of emissions;
    - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
    - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 2D .0535(f)(3).

#### Permit Deviations

- 3. Pursuant to 15A NCAC 2Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
  - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 2D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

# I.B Other Requirements under 15A NCAC 2D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 2D .0535, including 15A NCAC 2D .0535(c) as follows:

- 1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 2D .0535(c)(1) through (7).
- 15A NCAC 2D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the
  appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

# J. <u>Emergency Provisions</u> [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

- 2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
- 3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
  - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
  - b. the permitted facility was at the time being properly operated;
  - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
  - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- 4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

#### K. **Permit Renewal** [15A NCAC 2Q .0508(e) and 2Q .0513(b)]

This 15A NCAC 2Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 2Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 2Q .0512(b)(1), this 15A NCAC 2Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 2Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 2Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 2Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

# L. Need to Halt or Reduce Activity Not a Defense [15A NCAC 2Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### M. Duty to Provide Information (submittal of information) [15A NCAC 20 .0508(i)(9)]

- 1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
- 2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

#### N. **Duty to Supplement** [15A NCAC 2Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

#### O. **Retention of Records** [15A NCAC 2O .0508(f) and 2O .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

#### P. Compliance Certification [15A NCAC 2Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall

comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

- 1. the identification of each term or condition of the permit that is the basis of the certification;
- 2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
- 3. whether compliance was continuous or intermittent; and
- 4. the method(s) used for determining the compliance status of the source during the certification period.

# Q. Certification by Responsible Official [15A NCAC 2Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

# R. Permit Shield for Applicable Requirements [15A NCAC 2Q .0512]

- Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
- 2. A permit shield shall not alter or affect:
  - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
  - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
  - c. the applicable requirements under Title IV; or
  - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
- 3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 2Q .0523.
- 4. A permit shield does not extend to minor permit modifications made under 15A NCAC 2Q .0515.

# S. <u>Termination, Modification, and Revocation of the Permit</u> [15A NCAC 2Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

- 1. the information contained in the application or presented in support thereof is determined to be incorrect;
- 2. the conditions under which the permit or permit renewal was granted have changed;
- 3. violations of conditions contained in the permit have occurred;
- 4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
- 5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

# T. Insignificant Activities [15A NCAC 2Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

#### U. **Property Rights** [15A NCAC 20 .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

# V. <u>Inspection and Entry</u> [15A NCAC 2Q .0508(l) and NCGS 143-215.3(a)(2)]

- 1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
  - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
  - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
  - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

# W. Annual Fee Payment [15A NCAC 2Q .0508(i)(10)]

- 1. The Permittee shall pay all fees in accordance with 15A NCAC 20 .0200.
- 2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
- 3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 2Q .0519.

# X. Annual Emission Inventory Requirements [15A NCAC 2Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 2Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

# Y. Confidential Information [15A NCAC 2Q .0107 and 2Q. 0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 2Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 2Q .0107.

#### Z. Construction and Operation Permits [15A NCAC 2Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 2Q .0100 and .0300.

#### AA. Standard Application Form and Required Information [15A NCAC 20 .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 2Q .0505 and .0507.

#### BB. Financial Responsibility and Compliance History [15A NCAC 2Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

#### CC. Refrigerant Requirements (Stratospheric Ozone and Climate Protection) [15A NCAC 2Q .0501(e)]

- If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II
  ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR
  Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to
  the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40
  CFR Part 82 Subpart F.
- 2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
- 3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR □ 82.166. Reports shall be submitted to the EPA or its designee as required.

# DD. Prevention of Accidental Releases - Section 112(r) [15A NCAC 2Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. <u>Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)</u> – FEDERALLY-ENFORCEABLE ONLY Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

#### FF. Title IV Allowances [15A NCAC 2Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

#### GG. Air Pollution Emergency Episode [15A NCAC 2D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 2D .0300.

# HH. Registration of Air Pollution Sources [15A NCAC 2D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 2D .0202(b).

# II. Ambient Air Quality Standards [15A NCAC 2D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 2D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

# JJ. General Emissions Testing and Reporting Requirements [15A NCAC 2Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 2D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 2D .2600 and follow the procedures outlined below:

- 1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
- 2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
- 3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
- 4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
  - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
    - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
    - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
    - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
  - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 2D .2600 has precedence over all other tests.

# KK. Reopening for Cause [15A NCAC 2Q .0517]

- 1. A permit shall be reopened and revised under the following circumstances:
  - additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
  - additional requirements (including excess emission requirements) become applicable to a source covered by Title IV:
  - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
  - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 2Q .0513(c).
- 3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 2Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 2Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
- 4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
- 5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

# LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 2Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

# MM. Fugitive Dust Control Requirement [15A NCAC 2D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 2D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

# NN. Specific Permit Modifications [15A NCAC 2Q.0501 and .0523]

- 1. For modifications made pursuant to 15A NCAC 2Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
- 2. For modifications made pursuant to 15A NCAC 2Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
- 3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 2Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
  - a. a description of the change at the facility;
  - b. the date on which the change will occur;
  - c. any change in emissions; and
  - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the

application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

# OO. Third Party Participation and EPA Review [15A NCAC 2Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 2Q .0518 begins at the end of the 45-day EPA review period.

#### **ATTACHMENT**

# **List of Acronyms**

AOS Alternate Operating Scenario
BACT Best Available Control Technology

Btu British thermal unit CAA Clean Air Act

CAIR Clean Air Interstate Rule
CEM Continuous Emission Monitor
CFR Code of Federal Regulations
DAQ Division of Air Quality

DEQ Department of Environmental QualityEMC Environmental Management Commission

**EPA** Environmental Protection Agency

**FR** Federal Register

**GACT** Generally Available Control Technology

**HAP** Hazardous Air Pollutant

MACT Maximum Achievable Control Technology

NAA Non-Attainment Area

NCAC North Carolina Administrative Code NCGS North Carolina General Statutes

**NESHAP** National Emission Standards for Hazardous Air Pollutants

**NO**<sub>X</sub> Nitrogen Oxides

NSPS New Source Performance Standard OAH Office of Administrative Hearings

**PM** Particulate Matter

PM<sub>10</sub> Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less

**POS** Primary Operating Scenario

PSD Prevention of Significant DeteriorationRACT Reasonably Available Control Technology

SIC Standard Industrial Classification

**SIP** State Implementation Plan

SO<sub>2</sub> Sulfur Dioxide tpy Tons Per Year

**VOC** Volatile Organic Compound